

- 8 -

REMARKS

The Examiner has rejected Claims 1, 9, and 17 under 35 U.S.C. 112, second paragraph, as being indefinite. Specifically, the Examiner has taken issue with the phrase “more through.” Applicant respectfully disagrees with this rejection. Specifically, it is clear from the claim language itself as to what “more thorough” refers, namely a comparison between the claimed malware scanning and the claimed on-access scanning. Further, applicant relies on the plain and ordinary meaning of the term “thorough,” as evidenced by the exemplary dictionary definition below:

thorough

adj.

- Exhaustively complete: *a thorough search.*
- Painstakingly accurate or careful: *thorough research.*
- Absolute; utter: *a thorough pleasure.*

The American Heritage® Dictionary of the English Language, Fourth Edition

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The Examiner has rejected Claims 1, 8, 9, 16, 17, 24, and 27 under 35 U.S.C. 103(a) as being unpatentable over Cozza (U.S. Patent No. 5,502,815) in view of Chess et al. (U.S. Patent No. 6,772,346), Hruska (Virus Detection), and Ellenberger (U.S. Patent No. 5,684,875). Applicant respectfully disagrees with such rejection, especially in view of the amendments made hereinabove to each of the independent claims.

With respect to each of the independent claims, the Examiner has relied on item 58 “no” and item 62 in Figure 4 of Cozza to make a prior art showing of applicant’s claimed technique where “if no computer files containing malware are found in said storage location, then identifying said storage location as a clean storage location” (see this or similar, but not necessarily identical language in each of the independent claims).

- 9 -

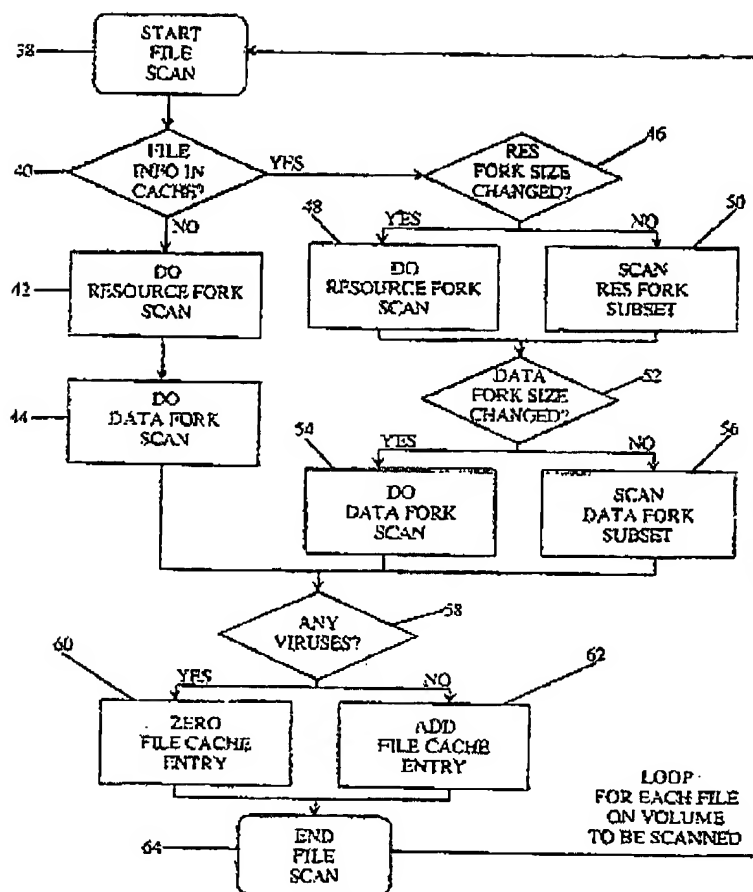


FIGURE 4

(Cozza, Fig. 4)

Applicant respectfully asserts that the cache file technique disclosed by Cozza in Figure 4 simply does not meet applicant's claimed "clean storage area." With reference to Figure 4, Cozza teaches that "[i]f no viruses were found in the file, then the file's scan information is added to the new cache in step 62" (Cozza, Col. 5, lines 1-3). In this excerpt, Cozza describes a method of updating a cache file if there are not any viruses found in the file. If all files were virus free, for example, the cache would contain information on every file. However, having a complete file cache does not imply that the entire cache represents "a clean storage location," as claimed by applicant. In

- 10 -

particular, the file cache, as disclosed by Cozza, operates on individual files whereas applicant claims “clean storage locations” (emphasis added).

In addition, the Examiner has relied on item 40 in Figure 4 of Cozza to make a prior art showing of applicant’s claimed technique of “... subsequently reading a computer file, [and] determining whether or not said computer file is stored within a clean storage location ...” (see the same or similar, but not necessarily identical language in each of the independent claims - emphasis added).

Applicant respectfully asserts that the Cozza excerpt relied upon by the Examiner, by virtue of the file details in the cache file, merely indicate whether the file is infected or not. Having the file details in a cache file simply does not even suggest that “... said computer file is stored within a clean storage location...” (emphasis added), as claimed. Thus, Cozza fails to meet applicant’s claimed language.

Still with respect to each of the independent claims, the Examiner has relied on item 320 and item 330 in Figure 3 of Chess to make a prior art showing of applicant’s claimed technique where “if said computer file is not stored within a clean storage location, then malware scanning [is performed on] said computer file” (see the same or similar, but not necessarily identical language in each of the independent claims).

- 11 -

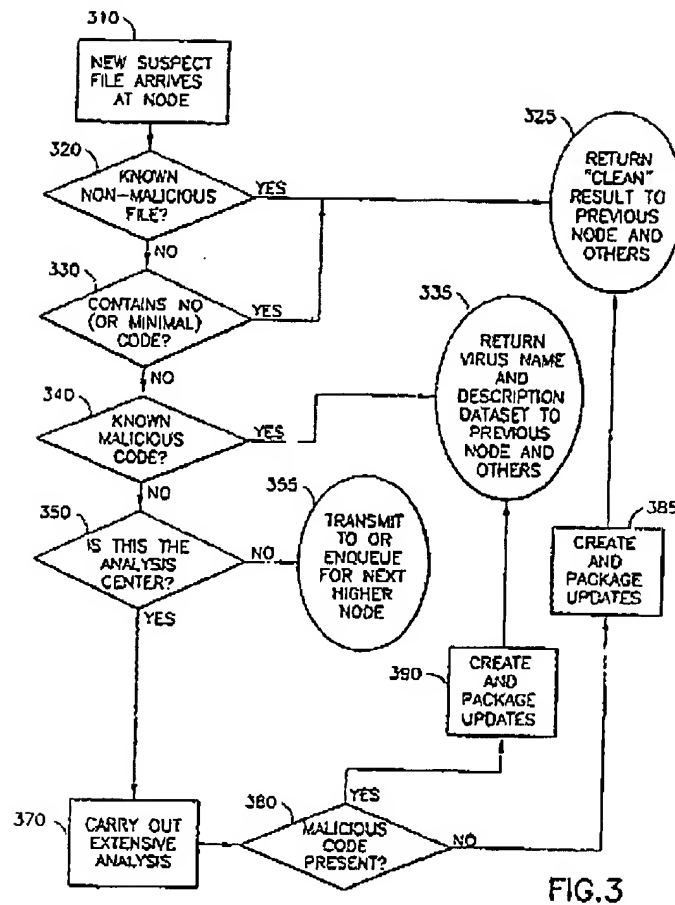


FIG.3

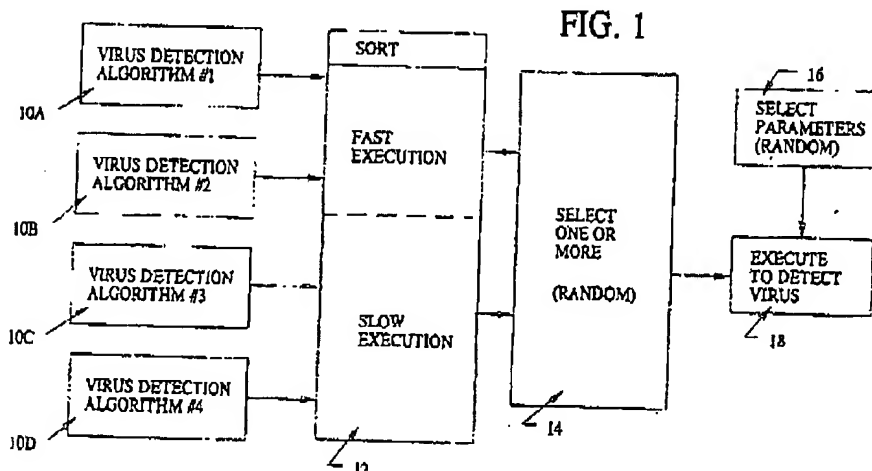
(Chess, Fig. 3)

Applicant respectfully asserts that above reference from Chess as relied upon by the Examiner teaches checking a suspect file to determine if it is malicious. Chess, however, fails to even suggest a scanning technique specifically conditioned on whether "... said computer file is not stored within a clean storage location ..." (emphasis added), as claimed. Chess simply makes no mention of a location of a file being checked, as specifically claimed, and scanning as a function of such location.

Still yet, the Examiner relied upon the following Figure 1 and Col. 8, lines 51-54 in Ellenberger to make a prior art showing of applicant's claimed technique "wherein said step of malware scanning all computer files stored within a storage location as a

- 12 -

background task is performed with more thorough scanning options selected than for on-access scanning applied to computer files not stored within clean storage locations and being accessed by a user" (see the same or similar, but not necessarily identical language in each of the independent claims).



(Ellenberger, Fig. 1)

"Step 4: Select some detection algorithms of the fast group and some of the thorough, but slow executing group." (Ellenberger, Col. 5, lines 25-26)

Applicant respectfully asserts that the figure and excerpt from Ellenberger listed above teaches a method of randomly selecting a mix of fast execution and slow execution virus detection algorithms for each scan. Ellenberger does not teach applicant's claimed technique "wherein said step of malware scanning all computer files stored within a storage location as a background task is performed with more thorough scanning options selected than for on-access scanning applied to computer files not stored within clean storage locations and being accessed by a user" (emphasis added), as claimed. Ellenberger simply does not even mention using different scanning options for background task scanning versus on-access scanning, as claimed.

- 13 -

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir.1991).

Applicant respectfully asserts that at least the third element of the *prima facie* case of obviousness has not been met, since the prior art references, when combined, fail to teach or suggest all of the claim limitations, as noted above. Nevertheless, despite such paramount deficiencies and in the spirit of expediting the prosecution of the present application, applicant has amended each of the independent claims, as follows:

"a background task that occurs as a function of when an associated computer system is at least substantially idle" (emphasis added - see this or similar, but not necessarily identical language in each of the independent claims).

The Examiner relies upon Page 129, Col. 2 of Hruska to make a prior art showing of applicant's claimed technique "wherein said step of malware scanning all computer files stored within a storage location is performed as a background task." In view of the amendments made to each of the independent claims, as indicated above, Hruska's on-access scanner simply fails to meet applicant's claim language. Specifically, the Examiner has argued that "intercept[ing] file open and file close operations" constitutes a background task. However, the background task, as now claimed by applicant, requires a task "that occurs as a function of when an associated computer system is at least substantially idle" (emphasis added). In view of such additional distinction, Hruska clearly fails to meet applicant's claimed technique.

- 14 -

Applicant further notes that the prior art is also deficient with respect to the dependent claims. For example, with respect to Claim 7 et al., the Examiner has rejected the same under 35 U.S.C. 103(a) as being unpatentable over Cozza (U.S. Patent No. 5,502,815) in view of Chess et al. (U.S. Patent No. 6,772,346), Hruska (Virus Detection), Ellenberger (U.S. Patent No. 5,684,875), Polk et al, Davidson et al., and Vignoles et al. (U.S. Patent No. 6,938,161). Specifically, the Examiner has relied on the following excerpts from Vignoles to make a prior art showing of applicant's claimed "wherein, when said storage area is being malware scanned with said updated malware definition data, computer files written to said storage location after said storage location was previously identified as a clean storage location are malware scanned before computer files that are unaltered since said storage location was previously identified as a clean storage location."

"If a scan is required, then processing proceeds to step 16 at which the selected and ordered drivers produced from steps 4 and 6 are applied in their priority order. During the scanning that takes place at step 16, an early terminate request can be received, for example by a user cancelling the scanning process or by an automatic time-out, but the priority ordering carried out at step 6 will have ensured that at least the highest threat viruses will have been scanned for." (Vignoles, Col. 3, lines 44-52)

Applicant respectfully asserts that Vignoles' ordered drivers refer to the order in which the viruses are scanned for within a single file. Vignoles does not, however, even suggest that "computer files written to said storage ... are malware scanned before computer files that are unaltered since said storage location was previously identified as a clean storage location" (emphasis added), as claimed. Vignoles thus clearly fails to disclose any technique that relates to the order in which computer files are scanned, as specifically claimed.

Thus, a notice of allowance or specific prior art showing of each of the foregoing claim elements, in combination with the remaining claimed features, is respectfully requested.

- 15 -

Still yet, applicant brings to the Examiner's attention the subject matter of new Claim 28 below, which is added for full consideration:

"wherein the background task avoids interference with a responsiveness of the computer system when the user starts to use the computer system" (see Claim 28).

Thus, all of the independent claims are deemed allowable. Moreover, the remaining dependent claims are further deemed allowable, in view of their dependence on such independent claims.

In the event a telephone conversation would expedite the prosecution of this application, the Examiner may reach the undersigned at (408) 505-5100. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 50-1351 (Order No. NAI1P496).

Respectfully submitted,
Zilka-Kotab, PC.

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